(19) World Intellectual Property Organization

International Bureau



(43) International Publication Date 27 January 2005 (27.01.2005)

(10) International Publication Number WO 2005/007717 A1

- C08F 290/00. (51) International Patent Classification7: 2/22, 2/50, A61K 31/74, 9/50, A61L 15/22, C12N 5/00
- (21) International Application Number:

PCT/SG2004/000094

(22) International Filing Date: 15 April 2004 (15.04.2004)

(25). Filing Language:

English

- (26) Publication Language:
- (30) Priority Data: 60/488,093

18 July 2003 (18.07.2003)

(71) Applicant (for all designated States except US): AGENCY FOR SCIENCE, TECHNOLOGY AND RESEARCH

[SG/SG]; 20 Biopolis Way, #07-01 Centros, Singapore 138668 (SG).

(72) Inventors; and

(75) Inventors/Applicants (for US only): YANG, YI Yan [CN/SG]; Block 5, Dover Crescent, #04-10, Singapore 130005 (SG). WANG, Li Shan [CN/SG]; Blk 1, Toh Yi Drive, #07-149, Singapore 591501 (SG).

(74) Agent: YUSARN AUDREY & PARTNERS; 190 Middle Road, #12-04, Singapore 188979 (SG).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KB, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Declaration under Rule 4.17:

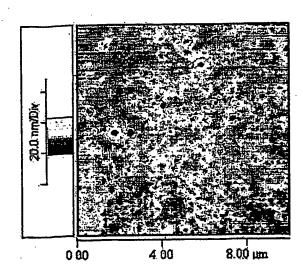
of inventorship (Rule 4.17(iv)) for US only

Published:

with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: THERMOSENSITIVE POLYMERS FOR THERAPEUTIC USE AND METHODS OF PREPARATION



(57) Abstract: A process for preparing a thermosensitive polymer from a microemulsion is provided. microemulsion comprises a monomer capable of forming a thermosensitive polymer and a polymerizable surfactant. Additional comonomers may be included in the microemulsion to vary the properties of the polymers produced. The resulting thermosensitive polymers may be nanoporous. The polymers according to the invention are suitable for use in medical applications, including use as a wound dressing and for delivery of cells to a graft